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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,694	05/01/2006	Wolfgang Kreisel	64609(70301)	3005
21874 7590 01/31/2008 EDWARDS ANGELL PALMER & DODGE LLP P.O. BOX 55874 BOSTON, MA 02205				
EXAMINER				
STONE, CHRISTOPHER R				
ART UNIT		PAPER NUMBER		
4173				
MAIL DATE		DELIVERY MODE		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/559,694

**Applicant(s)**

KREISEL, WOLFGANG

**Examiner**

CHRISTOPHER R. STONE

**Art Unit**

4173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 5-7 and 13-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 8-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SI/08)  
Paper No(s)/Mail Date 3 pages.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application.
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election of Group I (claims 1-13), vardenafil, no additional agent and bleed complications of portal hypertension, in the reply filed on December 26, 2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

The requirement is still deemed proper and is therefore made **FINAL**.

Claims 5-7 and 13-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention/species, there being no allowable generic or linking claim.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 12 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-4 and 8-12 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the treatment of portal hypertension and its bleeding complications, does not reasonably provide enablement for the prevention of portal hypertension and its bleeding complications. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to practice the invention commensurate in scope with these claims.

Claims 1-4 and 8-12 are drawn to a method of treating and preventing portal hypertension and associated conditions and complications comprising administering a PDE 5 inhibitor. Vardenafil and bleeding complications of portal hypertension are the elected species of PDE 5 inhibitor and disease condition related to portal vein pressure currently under examination. The prior art teaches that portal hypertension and its bleeding complications are difficult to treat, and that there is no known prevention. For instance, de Franchis et al teaches that all patients with cirrhosis of the liver will eventually develop portal hypertension and esophagogastric varices (abstract). This indicates a lack of predictability of preventing portal hypertension in the art. Furthermore, the Applicant has provided no working example demonstrating the ability of this method to prevent portal hypertension and has provided no direction on how to carry out the method of preventing portal hypertension. For these reasons, it would take undue experimentation for one of ordinary skill in the art to practice the prevention of portal hypertension with a reasonable expectation of success.

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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 12 provides for the use of a PDE 5 inhibitor, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia et al in view of Garcia-Tsao (both references provided by Applicant), further in view of Niazi et al (US Patent 6338862).

*Note: Claim 12 is being interpreted as a method claim for the purposes of the search of the prior art.*

Claims 1-4 and 8-12 are drawn to a method of treating portal hypertension comprising administering a PDE 5 inhibitor. Vardenafil and bleeding complications of portal hypertension are the elected species of PDE 5 inhibitor and disease condition related to portal vein pressure currently under examination.

Garcia teaches that administration of the PDE 5 inhibitor, Sildenafil, at 10 mg/kg body weight, decreases portal vein pressure (abstract). Garcia does not teach the use

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of the PDE 5 inhibitor Vardenafil, or that the PDE 5 inhibitor induced decrease in portal vein pressure treats bleeding complications of portal hypertension. Niazi teaches that Vardenafil is a known PDE 5 inhibitor (column 4, lines 57-61). Garcia-Tsao teaches that portal hypertension is the cause of gastroesophageal varices and variceal hemorrhage (abstract). Therefore it would have been obvious to one of ordinary skill in the art at the time of the instantly claimed invention to use, Vardenafil, in place of Sildenafil, since they have PDE 5 inhibitory activity, known to cause a decrease in portal vein pressure, to treat portal hypertension and the known complications of portal hypertension, gastroesophageal varices and variceal hemorrhage in humans. Thus, resulting in the practice of the instantly claimed invention with a reasonable expectation of success. Additionally, it would have been obvious to one of ordinary skill in the art at the time of the instantly claimed invention to administer Vardenafil in a single oral dosage form, since this method of administration is common in the pharmaceutical art.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER R. STONE whose telephone number is (571)270-3494. The examiner can normally be reached on Monday-Thursday, 7:30am-4:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin H. Marschel can be reached on (571) 272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

24 January 2008

CRS

/Ardin Marschel/

Supervisory Patent Examiner, Art Unit 1614